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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------------|
| 09/895,468 | 06/29/2001 | Alexey S. Kabalnov | 10003878 -1 | 6545 |
| 7590 | 01/13/2005 | | | EXAMINER TRAN, LY T |
| HEWLETT-PACKARD COMPANY Intellectual Property Administration P.O. Box 272400 Fort Collins, CO 80527-2400 | | | ART UNIT 2853 | PAPER NUMBER |

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

| | |
|-----------------------|------------------|
| Application No. | KABALNOV ET AL. |
| 09/895,468 | |
| Examiner Ly T TRAN | Art Unit 2853 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 01 November 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 9-15 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-7 is/are rejected.
- 7) Claim(s) 8 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. _____.
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. 5) Notice of Informal Patent Application (PTO-152)
6) Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claims 9-15 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No.

12/3/03

Note: species 1, group 1: claim 1-8 not 1-9 as indicated in the last office action as a typo.

Specification

2. The disclosure is objected to because of the following informalities: "metal sulfate salt" in claim 7 is not disclose in the specification.

Appropriate correction is required.

In the specification, the Applicant only discloses "metal salt" not "metal sulfate salt", so for the purpose of examination, the examiner interprets the claim 7 such as metal salt is selected from the group of cobalt, iron, copper...

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tognetti et al. (EP 960 873) in view of Pfaff et al (USPN 6,357,868).

Tognetti et al. discloses a method for printing on an article using any types of printing process (Page 2: line 3-15) comprising:

- Applying a fluid glazing material to an article creating a coating surface on the article, the fluid glazing material contains an under-printing agent (Page 2: line 33-35);
- Applying an aqueous chromophore-containing fluid onto the coated surface, the fluid primer contacts the chromophore-containing fluid (Page 2: line 36-40, 52-53, page4: line 13-15);
- Firing the article (Page 2: line 41);
- Transfer medium (Page 2: line 13);
- The article is a ceramic (Page 2: line 19-21).

Tognetti et al. discloses the claimed invention except that using direct printing instead of ink jet printing. Pfaff shows that direct printing and inkjet printing is an equivalent structure known in the art (column 2: line 35-42). Therefore, because direct printing and inkjet printing were art recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute ink jet printing for directing.

3. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tognetti et al. (EP 960 873) in view of Pfaff et al (USPN 6,357,868) as applied to claims 1-4 above, and further in view of Moffatt et al. (USPN 5,891,232).

The combination of Tognetti et al and Pfaff et al. fails to teach the chromophore containing fluid comprise a transition metal salt and the transition metal salt is selected from the group consisting of nitrates and sulfates.

Moffatt et al. teaches the transition metal salt is selected from the group consisting of nitrates and sulfates (Column 5: line 30-35).

It would have been obvious to one having skill in the art at the time the invention was made to modify Tognette and Pfaff with the teaching of Moffatt using the chromophore comprise a transition metal salt and the transition metal salt is selected from the group consisting of nitrates and sulfates. The motivation of doing so is to obtaining a smearfast and fast drying ink.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tognetti et al. (EP 960 873) and Pfaff et al. (USPN 6,357,868) in view of Moffatt et al. (USPN 5,891,232) as applied to claims 1 and 5 above, and further in view of Daniels (USPN 4,136,076).

The combination of Tognetti et al, Pfaff et al and Moffatt fails to teach the metal ion provided by the transition metal salt selected from the group consisting of cobalt, copper, nickel and tin.

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Daniels teaches the metal ion provided by the transition metal sulfate salt is selected from the group consisting of cobalt, copper, nickel and tin (Column 3: line 6-14)

It would have been obvious to one having skill in the art at the time the invention was made as modify Tognette, Moffatt and Pfaff with the teaching of Daniels to have the metal salt selected from the group consisting of cobalt, copper, nickel and tin. The motivation of doing so is to obtain fast drying with good extended print quality (Daniels USPN 4,136,076, Column 3: line 59-60).

Allowable Subject Matter

5. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 8 is allowable over prior art of record because at least prior art have not been found to anticipate or teach an additional coating selected from a group consisting a glaze, an adhesive, a colorant and a reflective material is applied prior firing

Response to Arguments

6. Applicant's arguments filed 11/1/04 have been fully considered but they are not persuasive.

Applicant's argument that the teaching of Pfaff is irrelevant is not persuasive because Pfaff teaches printing on the ceramic using direct printing or ink jet printing, Applicant pointed out the column 2; line 3-8 teaches the failure problem in the ink jet

printer but this is only the prior problem, Pfaff's invention is to over come this problem. However, the relevant is the teaching of the equivalent of using direct printing and ink jet printer to print on the ceramic material. It would have been one of ordinary skill in the art at the time the invention was made to substitute the ink jet printing for direct printing for the same purpose such as printing an image on the ceramic.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T TRAN whose telephone number is 571-272-2155. The examiner can normally be reached on M-F (7:30am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

- For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

l.x

1/10/05

msm
MANISH SHAM
Primary Examiner.